Part Six:

Urban and Community Forestry Goal, Policies, and Strategies for Rhode Island

Rhode Island is a forest state as well as an ocean state. Community forests and urban trees are critical to Rhode Island's future. The state will retain and restore tree resources necessary to insure the highest level of environmental integrity and quality of life for its citizens.

A Vision for Rhode Island's Urban and Community Forests

In 21st century Rhode Island, urban and community forests flourish. Forest resources underpin the state's verdant ecological tapestry, and support its vibrant economy. Tree resources constitute a "green" infrastructure for cities and towns, providing crucial environmental services and enriching the lives of all Rhode Islanders.

Shaded streets and emerald parks add to the allure of revived cities. Trees' capacities to shelter, buffer, absorb, and beautify are fully realized. Greenway corridors---fingers of vegetation both narrow and wide---permeate the built landscape, part of a statewide network linking city to countryside, and lacing communities together. Beyond the cities, the land is definitively rural; woodlands comprise a "working" landscape and separate distinctive villages. The integrity and economic viability of large forest tracts is assured, and forested watersheds purify water for drinking, offer habitat for wildlife, and provide places for public relaxation and recreation.

Rhode Islanders revere trees as links across generations. They understand the needs of trees and value community forests for the myriad functions they resiliently provide. People respect

trees and appreciate their pivotal role in beautifying the state's communities and countryside. Having figured out how to build what it needs while preserving forests and protecting trees, 21st century Rhode Island is an emerald state---vibrant in the green regalia of its urban and community forests.

Goal, Policies, and Strategies for Urban and Community Forests

Toward achievement of this vision, Rhode Island will pursue the following major goal, policies, and strategies. The major goal for urban and community forestry seeks to stabilize the erosion of urban and community forests, while recognizing that some fluctuations in forest land coverage within communities is both unavoidable, and necessary. Nonetheless, the goal establishes a tangible objective for the state and its communities to work towards.

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The plan goal, and each municipality's role in attaining it, should be considered in light of the recommendation of a national urban forestry group, American Forests, that urban metropolitan areas retain or attain an overall 40 percent tree canopy coverage (and higher in rural areas), in order to insure that a region's tree resources retain their capacity to carry out key environmental functions.

Following the goal, guidelines are presented for how Rhode Island communities might reasonably manage their forest land cover in the future. These guidelines are accompanied by tables illustrating the potential changes in forest land cover acreage if communities adhere to the guidelines.[1]

Programatic benchmarks, established by the Department of Environmental Management for its urban and community programs in Rhode Island are included in the plan to help communities see how their level of effort compares with other communities.

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1 While the *forest land cover* figures used in the tables are not comparable to *tree canopy coverage* statistics used in other regions (such data are not yet available for Rhode Island); they are nonetheless felt to be useful for communities that wish to examine and plan for, in a quantitative sense, the role of trees in their future landscapes. The land cover data should be used, however, with the understanding that they understate actual tree canopy coverage, particularly for the more urbanized communities.

Policies are established for use in evaluating future plans, programs, projects, and activities as they affect tree resources. Policies established herein must be reflected in future updates or revisions of local comprehensive plans.

Strategies are more specific actions recommended to guide future initiatives of public and private entities toward achievement of the goal and vision of this plan.

An implementation matrix designating entities to be involved in effectuating the recommended strategies concludes the plan.

Table 6
Forest Land Coverage by City and Town, 1988

Major Goal: Sustainable forest and tree resources

To guarantee that vibrant and productive urban and community forests are a fundamental component of Rhode Island's future landscape, and to maximize the benefits that urban and community forests provide as "green" infrastructure, the State of Rhode Island will seek to stabilize overall forest cover at or near the present level, and gradually repair the forest canopies of urbanized areas to the level recommended for proper ecological functioning.

Forest Land Cover Guidelines

Through the application of urban and community forestry principles, land protection and greenway initiatives, and support for sustainable commercial forestry and tree-friendly development practices; Rhode Island and its communities should seek to manage the state's urban and community forests as follows:

- *the state as an entirety should seek to maintain forest land cover at approximately 55 percent of total land area through the year 2020.*
- *communities having 50 percent or higher forest land cover in the 1995 land use survey, should seek to avoid a more than 2 percent decrease below their 1995 baseline of forest land cover through the year 2020.**
- *communities having 20-49 percent forest land cover in the 1995 land use survey, should seek to increase their forest land cover by 4 percent over the 1995 baseline by the year 2010, and by 8 percent over the 1995 baseline by 2020.**
- *communities having less than 20 percent forest land cover in the 1995 land use survey, should seek to increase their forest land cover by 2 percent over the 1995 baseline by 2010, and by 5 percent over the 1995 baseline by 2020.**

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* Including forested wetlands. A Land Use Survey is currently underway for Statewide Planning Program/RIGIS, based upon 1988 methodology and 1995 aerial photography. Anticipated data availability: March, 1999.

Table 6.1 provides the latest available forest land cover data for Rhode Island communities and guidelines for the future. Table 6.2 illustrates the changes in forest land cover statewide and by community that could result by the years 2010 and 2020 if the guidelines presented above are adhered to.

Setting challenging guidelines directly tied to forest land coverage reflects a new, performance-based approach to goal setting. Having quantitative guidelines allows the state, individual communities, and citizens to assess progress toward the forest vision for Rhode Island, and to adjust strategies and programs accordingly. Measuring progress towards the goal will require the state and communities to devise a new way of thinking about tree resources. With numerical guidelines in mind, tree resources may be seen less as a limitless, expendable commodity that can be ignored, and more as a renewable resource that must be properly managed. State land use and forest survey methods will also have to be refined to encompass better tracking of canopy coverage statistics. Communities will need to embrace more sophisticated Geographic Information System (GIS)-based tree inventories to monitor their forest land coverage and to model future canopy coverage including the "grow-out" potential of newly-planted trees.

This plan's vision, goal and guidelines, as future objectives, should be periodically revisited and adjusted over time. This plan should be updated within a decade so that Rhode Islanders are able to reassess whether its vision, goal, and guidelines remain cogent and realistic.

Urban and Community Forestry Program Benchmarks

Attainment of a sustainable forest goal for the state will be largely dependant upon the support that Rhode Island's communities provide for protection and enhancement of tree resources. For this reason, the plan establishes benchmarks for continuing the growth and development of local tree program efforts. Sound local programs that adequately plan for, inventory, legally protect, invest in, maintain, and expand public tree resources, and that encourage a similar commitment on the part of the private sector for private trees in the community are essential to long-term forest sustainability.

Program benchmarks reflect criteria of the U.S. Forest Service's Performance Measurement Accountability System (PMAS) used to assess state and community progress in forestry programs, including urban forest management. Assessment of community program status is accomplished by DEM and reported annually to the Forest Service.

Program Level Criteria

Sustained: includes communities having an organized and functional forestry program providing continuity, planning, awareness, support, and a budget; and requiring infrequent involvement by federal or state forestry agencies.

Developmental: includes communities that are pursuing activities to improve the overall health of their community forests, including conducting an inventory, preparing a maintenance plan, or pursuing adoption of policy and regulations for tree planting, maintenance, and protection.

Formative: includes communities that have decided to start an urban forestry program, and are working to establish tree boards, organize volunteer efforts, hold discussions with community leaders, and conduct a preliminary assessment of community forest resources.

Project: includes communities involved only with specific urban forestry efforts such as an Arbor Day tree planting, or a one-time grant. Such efforts generally do not lead to a long-term investment.

Non-participatory: includes communities having no known involvement in urban and community forestry.

TABLE 6.3 Rhode Island Urban and Community Forestry Program Level Benchmarks							
	Number of Rhode Island Communities Attaining Specified Program Level						
PROGRAM LEVEL[‡]	1997 actual*	1998 actual*	1999 target	2000 target	2001 target	2002 target	2003 target
Sustained	2	3	3	4	5	6	6
Developmental	3	5	7	7	10	9	11
Formative	8	11	12	14	13	15	17
Project	12	14	12	15	12	10	6
Non-participatory	15	7	6	0	0	0	0

 *Source: RIDEM, DFE assessment, based on 40 communities, including Narragansett Indian Tribe.
 [‡] Program levels defined by U.S. Forest Service – See definitions above table.

In addition to the existing PMAS Program criteria identified above, communities should endeavor to establish additional targets for self-evaluating their performance and improvement in community forestry efforts. Examples of such criteria might include:

- annual expenditures per capita on urban/community forestry program.
- annual tree planting levels as percentage of tree removals and/or available planting locations.
- annual health/condition assessment of targeted percentage of public tree stock.
- annual percentage completion (or update) of targeted percentage of inventory of public tree stock.
- annual progress on mitigation of tree hazards/maintenance needs identified though inventory/assessment of public tree stock.

Policies and Strategies

(See also relevant policies of the Land Use Policies and Plan, Forest Resource Management Plan, and Greenspace and Greenways Plan Elements of the State Guide Plan).

GENERAL

G1 Carry out recommended policies. Seek a higher profile for the protection and management of urban and community forest resources in public and private c o m m u n i t y   p l a n n i n g , development, capital investment and infrastructure management decisions.

1. *Develop and maintain a comprehensive statewide urban and community forestry program to encourage the preservation, protection, and planting of trees on public and private lands.*

G2 Include urban and community forests in the state's planned greenway network.

1. *Plan community-wide greenway systems connecting town forests, watersheds, riparian (river/stream/ wetland) corridors, wildlife habitats, and woodland parks, refuges, and recreation areas.*
2. *Protect significant forest resources through acquisition programs, donations, and public dedication requirements.*
3. *Retain vacant publicly-owned land, including excess highway rights-of-way that have open space value.*

G3 Increase the legal protection accorded to tree resources under state and local laws.

1. *Adopt and enforce community tree ordinances regulating the planning, planting, maintenance, and removal of trees on public property.*
2. *Adopt zoning and land development standards requiring the consideration and appropriate protection of trees and vegetation during site planning and development, and insuring that tree resources will provide the environmental benefits and amenities for new development. Encourage standards requiring sustainable percentages of tree canopy coverage (that include the potential "grow-out" of new trees planted) for different development zones or types.*
3. *Enact local zoning and land development ordinances that offer incentives (density bonuses, flexibility in lot lines, etc.) for the clustering of development units in less sensitive portions of the site, and the reservation of sensitive and environmentally or culturally significant site features as open space.*
4. *Evaluate existing legislation relating to replacement requirements for public trees removed or destroyed. Consider amendments to this statute that would strengthen protection of public trees, including those along state highways in urban areas, but provide for replacement ratios to be based upon sound silvicultural practices and the capacities of state and local programs.*
5. *Consider the need for measures to limit pre-development land clearance activities that conflict with the local comprehensive plan or are not in accord with established "best management practices", and that are not covered by present subdivision/ land development or zoning act definitions.*

PLANNING FOR URBAN AND COMMUNITY FORESTS

P1 Identify tree resources as a significant natural resource to be comprehensively planned for.

1. *Maintain and periodically update this urban and community forestry element of the State Guide Plan.*
2. *Update state comprehensive planning standards to explicitly require comprehensive planning for community tree resources, including inventorying, mapping, and policy development.*
3. *Insure that local comprehensive plans provide adequate policies for protection and enhancement of urban and community tree resources.*
4. *Coordinate planning for trees with all interested groups and agencies affected by or having an effect upon tree resources.*

P2 Track the status of Rhode Island's urban and community forest resources on a statewide and community level using GIS-based tools, land use surveys, and community tree inventories.

1. *Develop community tree inventories, identifying the number, locations, types, and conditions of existing public trees, as well as vacant sites where trees could be added. Encourage communities to expand tree inventories to include canopy cover data.*
2. *Insure that future state land use surveys include forest canopy coverage data.*
3. *Utilize GIS-based software packages to establish the functions and benefits performed by community tree resources, and to assess the monetary contributions or value added by trees for use in community development decisions affecting trees.*

TREES AND DEVELOPMENT

D1 Encourage new development that respects forest resources as vital elements of the community and properly integrates trees to create high-quality living and working environments.

1. *Retain or create greenbelts of forest and farmland as a demarcation between urban and rural areas of the state.*
2. *Encourage new intensive growth to locate in established urban and suburban areas, and favor village-centered growth patterns in rural areas.*
3. *Encourage greater use of open space subdivision and similar development forms to promote compact development patterns that retain a large percentage of open space and trees.*
4. *Require evaluation and protection of natural features and cultural characteristics, including significant woodlands and special trees, as part of the review process for new subdivision and land development projects.*
5. *Encourage tree-sensitive site design and development practices that include input from landscape and tree resource professionals to identify and protect significant tree resources.*
6. *Encourage greater municipal expertise in landscape design and tree resource specialties to improve consideration of tree and landscape issues during the development review process.*
7. *Encourage developers to include landscape and tree professionals in site development teams.*

D2 Integrate trees into the built environment to beautify, buffer, and shelter structures and facilities.

1. *Replace existing tree resources unavoidably lost during development to ensure that the community retains an optimal level of trees for ecological health.*
2. *Encourage the retention of trees in existing developed areas, and include an optimum level of trees and landscaping in all new development and redevelopment projects.*
3. *Plant new trees strategically to maximize the public benefits they provide while minimizing potential conflicts with infrastructure and public safety.*
4. *Utilize trees and vegetation to integrate and/or create an aesthetic transition between differing land uses.*
5. *Plant significant trees in prominent locations where space and other conditions permit.*
6. *Use street trees, landscaping, and container plantings to enliven and beautify downtowns, "Main Streets," and suburban shopping districts.*
7. *Use trees and landscaping to frame landmark structures or to highlight the graceful lines of historic buildings.*
8. *Develop design and landscaping standards for commercial and industrial areas that require the use of trees to soften the edges or break the lines of large, bulky buildings and to enliven monotonous facades.*
9. *Use trees and landscaping creatively to mask unsightly land uses or to buffer adjoining uses from the noise, odor, or other pollution of an "undesired" land use.*

D3 Maximize reliance on the environmental benefits (runoff control, pollutant attenuation, climatic sheltering) provided by trees as a means of minimizing future service costs of development.

1. *Establish flexible buffer requirements, enabling designers to employ vegetated zones of varying types, widths, and densities to effectively minimize pollution, noise, and other negative impacts on surrounding areas and uses.*
2. *Develop stormwater management systems that protect public and private property, maintain water quality, and minimize costs. Encourage the maximum reliance on retention of natural vegetation and the use of natural drainageways, vegetated buffers, swales and filter strips, and permeable paving surfaces to control surface runoff in new developments. Encourage adherence to the design principles of the R.I. Soil and Erosion Control Manual and the R.I. Stormwater Design and Installation Standards Manual for structural stormwater control.*
3. *Develop guidelines for tree planting or retention to shade and/or shelter buildings to minimize their energy consumption needs. Encourage the production of housing that is designed, sited, constructed, and landscaped to facilitate the conservation of energy and water. Consider the energy effects of proposed landscaping (or land clearance) when reviewing subdivision and land development projects.*

D4 Promote the development and management of transportation corridors as greenways.

1. *Identify design objectives (including landscaping and aesthetic goals) for arterials, gateways, major intersections, and collector streets in local comprehensive plans.*
2. *Encourage the use of vegetated buffers to reduce stormwater runoff from highways and parking lots, and to serve as noise barriers along high-volume highways and rail corridors.*
3. *Develop guidelines encouraging the establishment of street trees as buffers delineating pedestrian and vehicular portions of the right-of-way.*
4. *Enhance the livability of communities by designing roadways that include landscaping, parkway trees, compatible street furnishings, and scenic view corridors.*
5. *Require the reservation of planting strips of sufficient width for street trees in plans for new streets and roads approved under local subdivision and land development review provisions.*
6. *Encourage a high level of tree planting and landscaping in state construction projects.*

MANAGING TREES AS COMMUNITY INFRASTRUCTURE

I1 Recognizing that forests are a community asset, promote an increased commitment to public tree planting and maintenance.

1. *Insure that municipal budgets provide sufficient resources for proper maintenance and replacement of public tree resources. The National Arbor Day Foundation's recommended minimum investment level in community tree resources is $2 per capita per year.*
2. *Retain and increase street trees in urban and suburban neighborhoods to enhance neighborhood aesthetics and character, and provide environmental benefits.*
3. *Support efforts by statewide and local tree groups to actively involve citizens in tree planting, care, and advocacy.*
4. *Promote greater use of the statutory provision allowing public trees to be planted on private land proximate to public ways, as a means to enlist private stewardship of public trees and provide flexibility in siting trees to avoid infrastructure conflicts.*
5. *Cooperate with utility companies and non-profit organizations to develop metropolitan tree planting programs that can reduce energy demands or peak loads, counter the increase in "greenhouse gases," and reduce the "urban heat island" temperature gradient.*
6. *Include tree planting and establishment care as a capital expenditure in new development, redevelopment, and major infrastructure projects.*
7. *Consider funding tree planting projects as a capital development expense under state and local open space and greenways bond issues.*
8. *Develop cost-recovery programs to insure that the costs of replacing public trees damaged or destroyed by negligent private actions are defrayed.*

I2 Maximize the impact of public tree planting. Plant the "right tree for the right place," using trees appropriate to site conditions.

1. Tailor the selection of tree species to the climate (sunlight, heat, soil, water availability, etc.), location (relative to structures, roadways, overhead and underground utilities, etc.), and benefits desired (shade, climatic buffering, runoff control, etc.) at the intended site. Avoid planting large trees under overhead wires.
2. Promote a diversity of species in tree planting programs and/or requirements.
3. Encourage a consistent annual rate of tree planting to foster an age-diverse tree population.
4. Work with the nursery industry and landscaping profession to insure that balled tree stock is supplied and installed with the root flare properly situated relative to the site grade, so as to facilitate the proper establishment and long-term vitality of newly-planted trees.
5. Encourage communities to designate qualified staff to assist in and oversee community and neighborhood tree planting efforts.

I3 Guard against the unnecessary loss of community tree resources, especially historic and special trees.

1. Develop an inventory and designation process for historic, landmark, and champion trees worthy of special status and protection as individual specimens. Recognize and provide technical assistance to private landowners who protect such trees, and develop standards for their protection through local tree and/or land development ordinances.
2. Design the placement of utilities, sidewalks, roadways, etc. to minimize the impact on existing and proposed trees, both within public rights-of-way and on private property. Coordinate utility, road,

and sidewalk excavation projects with the local tree warden to minimize potential impacts of construction upon street tree resources.
3. Seek custodial agreements to insure that any trees planted in new planned developments will be properly cared for.
4. Consider performance bonding for a one-year establishment period for newly-planted trees and up to three years for assurance of the health of existing trees designated to be "saved during construction."

I4 Encourage a high level of maintenance of community green infrastructure through adopted standards and adequate funding.

1. Work to insure that each public tree planted is accompanied by a commitment for adequate long-term stewardship.
2. Develop tree inspection and maintenance standards for public trees to avoid hazardous conditions and minimize municipal liability for tree damages.
3. Require new development to contribute its fair share to the cost of providing and maintaining community infrastructure, including green infrastructure (parks, street trees, etc.).
4. Encourage partnerships with utility companies for replacement of street trees removed for overhead wire clearances.
5. Promote coordination in public right-of-way maintenance to insure that tree pruning and removal guidelines safeguard public health and welfare, enhance the vitality of community tree resources, and support community objectives for streetscape aesthetics.
6. Encourage the Department of Transportation to review and update its tree protection detail in construction specifications to enhance the protection of trees to be saved during projects. (Note that RIDOT specifications are used by many communities as basic standards for construction projects).

TREES AND LOCAL ECONOMIES

EC1 Support sustainable forest-product industries as a local economic development strategy and a means to encourage retention of land in forests by private landowners.

1. *Support efforts by private forest landowners to sustainably manage commercially-productive forest lands by providing education, information, research and technical assistance.*
2. *Provide research, outreach and education, and technical assistance to promote the development of viable alternative forest products and services (recreation/nature study, decorative and medicinal plants, woodcrafting, specialty woods, etc.) as a local economic development strategy and means to support retention of forested land.*
3. *Amend the R.I. Farm, Forest and Open Space Act to provide greater incentives for forest landowners to retain their land in forests by establishing a uniform valuation methodology for lands enrolled in the program, and providing for a right of first refusal to the municipality on lands in the program.*
4. *Consider the economic and other impacts of proposed new laws, ordinances, and regulations to avoid threatening the economic viability of privately-held forest lands and increasing pressure for their development.*
5. *Insure that the comprehensive plans of rural communities recognize and support the practice of sustainable forestry and the role of forest products in the local economy. Designate areas for working forests in the comprehensive plan, and revise land development regulations to insure the continued viability and priority of working forest land use in designated areas.*
6. *Educate community officials and the public on the favorable impact which retention of land in forests and open space has on the costs of community services and local tax rates.*

COMMUNICATING THE VALUES OF TREE RESOURCES TO THE PUBLIC

ED1 Increase public awareness of the benefits provided by community tree resources.

1. *Cooperate with statewide and local tree advocacy organizations to educate the public on the importance and values of trees and on proper tree stewardship practices.*
2. *Educate builders and developers on the beneficial effect that retention of mature trees or provision of greenways and other forest amenities provide in the marketing and valuation of new developments.*
3. *Educate the business community about the value of tree resources (landscaped grounds, street trees, and aesthetic surroundings) in creating a favorable environment for commerce.*
4. *Educate community officials on the positive contribution that urban and community forest resources make to the overall attractiveness and desirability of the state and its communities.*

ED2 Increase awareness of the techniques for protecting existing tree resources during construction and development activities.

1. *Work in partnership with groups such as the R.I. Public Works Association, R.I. Chapter, American Planning Association, and R.I. Builders' Association to educate public works officials, municipal planners, utility officials, builders and developers, and private landowners on construction practices and methods that minimize harm to trees.*

BUILDING PARTNERSHIPS FOR TREES

PR1 Forge partnerships with private groups supporting forest resource protection.

1. *Offer incentives to private forest landowners for protection and management of publicly significant forest and tree resources.*
2. *Cooperate with local land trusts and private land protection and conservation groups to protect significant forest resources.*

PR2 Involve the public and the private sector in efforts to plant and maintain community tree resources including public trees.

1. *Encourage neighborhood tree planting and stewardship programs modeled on efforts such as Providence's and Newport's neighborhood planting programs.*
2. *Seek support for endowment of a statewide tree stewardship fund modeled on the Sharpe and Raleigh trusts in Providence.*
3. *Cooperate with utilities in offering education and incentive programs to customers who install appropriate landscaping as effective means to lessen energy demand in existing buildings.*